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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,338	04/11/2001	Ian Alexander Rose	CITR1140	5910

7590 09/10/2004

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EXAMINER

NGUYEN, THANH T

ART UNIT PAPER NUMBER

2144

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,338

Applicant(s)

ROSE, IAN ALEXANDER

Examiner

Tammy T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/11/01. ✓
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____



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Detailed Office Action

1. This action is in response to the application 09/807,338 filed. April 11, 2001
2. Claims 1-28 have been examined.

Specification

3. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

4. Claims 4-12, and 17-23 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 1-3, and 13-16. See MPEP § 608.01(n).
Accordingly, the claims 4-12, and 17-23 have not been further treated on the merits.
5. Therefore, Claims 1-3, 13-16, and 24-28 are presented for examination.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 13-16, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merico Edward Argentati., (hereinafter Argentati) U.S. Patent No. 5,754,120 in view of Shah et al., (hereinafter Shah) U.S. Patent No. 5,880,959.
8. As to claim 1, Argentati teaches the invention as claimed, including a connection manager for selecting paths, from a plurality of paths available from service providers in a communications network, to route broadband traffic in the network, wherein the connection manager includes: a. a connection model indicating functional feature supported by each path in the network and location of terminations for respective paths (col.2, line 60 to col.3, line 22); and c processing means, operated in response to a client requirement for a connection with desired features between two locations in the network (col.9, lines 60-67), to i) identify, from the connection model in light of the desired features, suitable candidate paths for routing communications traffic between the two locations (col.11, lines 40-60, and col.12, lines 12-20) and ii) determine, from the candidate paths an optimal selection of paths connecting said locations (col.10, lines 51-65). But Argentati does not teach a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path. However, Shah teaches a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path (col.7, lines 30-50). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to

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combine the teachings of Argentati and Shah to have a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path because it would have an efficient system that can provide a dynamic methodology for design process is ongoing by recalculating a cost metric and determining new optimum paths.

9. As to claim 2, Argentati teaches the invention as claimed, wherein the functional features indicated by the connection model include one or more of the following: i) communications protocol; ii) transmission rate; iii) availability of the path; and iv) average error rate (col.3, lines 10-18).
10. As to claim 3, Argentati teaches the invention as claimed, wherein the cost exposed by the cost model reflects the resources required to implement a path having a particular set of features (col.3, lines 25-30).
11. As to claim 13, Argentati teaches the invention as claimed, including a connection manager for selecting paths, from a plurality of paths available from service providers in a communications network, to route broadband traffic in the network, wherein the connection manager includes: a . A cost model provided by each service provider that exposes to clients the cost of using functional features supported by each path (col.2, line 60 to col.3, line 22); and b. processing means, operated in response to a client requirement for a connection with desired features involving a plurality of terminal in the network (col.9, lines 60-67), to i) identify, in light of the desired features, candidate paths for routing communications traffic amongst said plurality of terminal (col.8, lines 40-52) and ii) determine, from the candidate paths and at least selection of paths connecting said

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terminal (col.10, lines 51-67). But Argentati does not teach the basis of cost exposed by the cost model. However, Shah teaches the basis of cost exposed by the cost model (col.5, lines 50-55, col.6, lines 46-51). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Argentati and Shah to have the basis of cost exposed by the cost model because it would have an efficient system that can provide specific function to use the assigned cost metric to determine an optimum paths.

12. As to claim 14, Argentati teaches the invention as claimed, wherein the cost model also exposes to clients delay in the service provider making a path available (col.3, lines 10-18).
13. As to claim 15, Argentati teaches the invention as claimed, wherein available paths include paths pre-existing in the network (col.3, lines 10-18).
14. As to claim 16, Argentati teaches the invention as claimed, wherein available paths include paths that can be created by a service provider (Fig.4).
15. As to claim 24, Argentati teaches the invention as claimed, a selection method for selecting paths, from a plurality of paths available from service providers in a communications network, to route broadband traffic in the network, including the steps of: a. creating a connection model that indicates functional feature supported by each path in the network and location of terminations for respective paths (col.2, line 60 to col.3, line 22); b. creating a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path; and c. processing a client requirement for a connection with desired features between two locations in the

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network (col.9, lines 60-67), by i) identify, from the connection model in light of the desired features, suitable candidate paths for routing communications traffic between the two locations (col.11, lines 40-60, and col.12, lines 12-20) and ii) determine, from the candidate paths an optimal selection of paths connecting said locations (col.10, lines 51-65). But Argentati does not teach a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path. However, Shah teaches a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path (col.7, lines 30-50). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Argentati and Shah to have a cost model associated with the connection model that exposes to clients the cost of using the functional features for each path because it would have an efficient system that can provide a dynamic methodology for design process is ongoing by recalculating a cost metric and determining new optimum paths.

16. As to claim 25, Argentati teaches the invention as claimed, wherein the step of creating the connection model reflect attributes of network elements deployed by each service provider (Fig.4).

17. As to claim 26, Argentati teaches the invention as claimed, including a method of managing selection of paths from a plurality of paths available from service providers in a communications network, to route broadband traffic in the network, including the steps of: a . creating a cost model whereby each service provider that exposes to clients the cost of using functional features supported by respective paths (col.2, line 60 to col.3, line 22);

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and b. processing a client requirement for a connection with desired features involving a plurality of terminal (col.9, lines 60-67), by i) identify, in light of the desired features, candidate paths for routing communications traffic amongst said plurality of terminal (col.8, lines 40-52) and ii) determine, from the candidate paths and at least selection of paths connecting said terminal (col.10, lines 51-67). But Argentati does not teach the basis of cost exposed by the cost model. However, Shah teaches the basis of cost exposed by the cost model (col.5, lines 50-55, col.6, lines 46-51). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Argentati and Shah to have the basis of cost exposed by the cost model because it would have an efficient system that can provide specific function to use the assigned cost metric to determine an optimum paths.

18. As to claim 27, Argentati teaches the invention as claimed, wherein the cost model is transferred to the connection manager from the service provider (Fig.4).
19. As to claim 28, Argentati does not teach the client is a superior connection manager and a superior cost model is constructed from an aggregate of cost models transferred from subordinate connection managers. However, Shah teaches the client is a superior connection manager and a superior cost model is constructed from an aggregate of cost models transferred from subordinate connection managers (col.5, lines 50-55, col.6, lines 46-51). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Argentati and Shah to have superior cost model because it would have an efficient system that can provide specific function to use the assigned cost metric to determine an optimum paths.

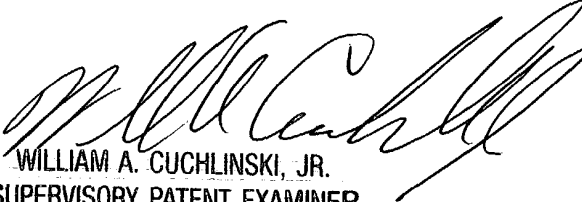
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Conclusion

20. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(703) 305-7982**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 6:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to **(703) 872-9306**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Bill Cuchlinski, may be reached at **(703) 308-3873**.

TTN
September 1, 2004


WILLIAM A. CUCHLINSKI, JR.
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